AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A computerized system for controlling a manufacturing design process including a first design sub-process and a second design sub-process, outcomes of one of the first and second design sub-processes being linked to outcomes of the other of the first and second design sub-processes and vice versa by a relationship between one or more first design sub-process variables (A) and one or more second design sub-process variables (B), the system comprising:

a processor programmed to provide a ~~user~~ configurable interface between said first and second design sub-processes, said ~~user~~ configurable interface allowing inputs to ~~a user of~~ said system to control the manufacturing design process by specifying which of the one or more variables (A,B) are active variables, each of which can have its domain ~~their domains~~ modified by at least one process within the sub-process to which the each active variable belongs, and which of the one or more variables (A,B) are passive variables, each of which has its domain ~~have their domains~~ determined within allowable values by ~~the~~ domains of the other variable or variables in the relationship but not by any process within the sub-process to which the each passive variable belongs, and to determine ~~determining~~ a manner of evaluation of the relationship and a dominance of a sub-process in ~~an overall~~ the manufacturing design process from the specifying ~~specification~~ of which of the variables are active variables and which are passive variables.

Claim 2 (Currently Amended): A computerized system as claimed in claim 1, wherein the [[user]] configurable interface defines a plurality of possible relationships between the first and second design sub-processes and the [[user]] configurable interface comprises

relationship selection means allowing inputs ~~to allow a user~~ to select at least one relationship from the plurality of relationships.

Claim 3 (Currently Amended): A computerized system as claimed in claim 2, wherein the relationship selection means allows inputs ~~a user~~ to select a plurality of relationships.

Claim 4 (Currently Amended): A computerized system as claimed in claim 2, wherein the [[user]] configurable interface is configured to specify which variables are treated as active and which are treated as passive on the basis of the selected relationship.

Claim 5 (Currently Amended): A computerized system as claimed in claim 1, wherein the [[user]] configurable interface comprises goal specification means ~~alternatively or in combination with the above~~ which allows inputs ~~a user~~ to specify a goal or goals of the design process and wherein the [[user]] configurable interface is configured to specify the relationship on the basis of the user specified goal or goals.

Claim 6 (Previously Presented): A computerized system as claimed in claim 1, wherein there is more than one relationship between the first and second design sub-processes.

Claim 7 (Canceled).

Claim 8 (Previously Presented): A computerized system as claimed in claim 1, wherein the relationship comprises either:

one or more rules; or

one or more algorithms; or

a combination of one or more rules and one or more algorithms.

Claim 9 (Previously Presented): A computerized system as claimed in claim 1, wherein there are more than two sub-processes.

Claim 10 (Previously Presented): A computerized system as claimed in claim 9, wherein there are relationships between either all or some of the sub-processes.

Claim 11 (Currently Amended): A computerized system as claimed in claim 9, wherein there are relationships between more than two sub-processes ~~sub-processes~~.

Claim 12 (Previously Presented): A computerized system as claimed in claim 1, wherein the system allows constraints to be placed on a domain of a variable.

Claim 13 (Currently Amended): A computerized system as claimed in claim 12, wherein the system allows the constraints to be defined as hard ~~"hard"~~ constraints which cannot be breached or soft ~~"soft"~~ constraints which can be breached if other conditions are satisfied.

Claim 14 (Currently Amended): A computerized system as claimed in claim 1, further comprising an optimisation engine for optimising the manufacturing design process using one or more rules to analyse available solutions of the manufacturing design process.

Claim 15 (Currently Amended): A computerized system as claimed in claim 14, wherein the optimisation engine is configured to compare potential solutions to the manufacturing design process with pre-existing solutions to enable pre-existing solutions to be identified ~~brought to the attention of a user~~.

Claim 16 (Currently Amended): A computerized system as claimed in claim 1, wherein the [[user]] configurable interface comprises relationship specification means for specifying the relationship between the sub-processes.

Claim 17 (Currently Amended): A method for controlling a manufacturing design process including a first design sub-process and a second design sub-process, outcomes of one of the first and second design sub-processes being linked to outcomes of the other of the first and

second design sub-processes and vice versa by a relationship between one or more first design sub-process variables (A) and one or more second design sub-process variables (B), the method comprising:

providing a ~~user~~ configurable interface between the first and second design sub-processes and configuring the ~~user~~ configurable interface to control the manufacturing design process by specifying which of the one or more variables (A,B) are active variables, each of which can have its domain ~~their domains~~ modified by at least one process within the sub-process to which the each active variable belongs, and which of the one or more variables (A,B) are passive variables, each of which has its domain ~~have their domains~~ determined within allowable values by the domains of the other variable or variables in the relationship but not by any process within the sub-process to which the each passive belongs,

determining a manner of evaluation of the relationship and a dominance of a sub-process in ~~an overall~~ the manufacturing design process from the specifying ~~specification~~ of which of the variables are active variables and which are passive variables, and

storing a result of the determining for use in controlling the manufacturing design process.

Claim 18 (Previously Presented): A method as claimed in claim 17, further comprising specifying the relationship.

Claim 19 (Currently Amended): A method as claimed in claim 18, further comprising specifying the relationship by selecting at least one relationship from a plurality of possible relationships between the first and second design ~~sub-process~~ sub-processes.

Claim 20 (Original): A method as claimed in claim 19, comprising specifying which variables are treated as active and which are treated as passive on the basis of the selected relationship.

Claim 21 (Currently Amended): A method as claimed in claim 18, comprising specifying the relationship on the basis of ~~the user~~ specified goal or goals.

Claim 22 (Canceled).

Claim 23 (Original): A method as claimed in claim 17, further comprising placing constraints on the domain of at least one variable.

Claim 24 (Currently Amended): A method as claimed in claim 23, further comprising defining the constraints as a hard ~~"hard"~~ constraint which cannot be breached or soft ~~"soft"~~ constraint which can be breached if other conditions are satisfied.

Claim 25 (Currently Amended): A method as claimed in claim 17, further comprising optimising the manufacturing design process using one or more rules to analyse available solutions of the manufacturing design process.

Claim 26 (Currently Amended): A method as claimed in claim 25, further comprising comparing potential solutions to the design process with pre-existing solutions to enable pre-existing solutions to be identified ~~brought to the attention of a user~~.

Claim 27 (Currently Amended): A computer-readable medium on which computer-executable instructions for method for controlling a manufacturing design process are encoded, the manufacturing design process including a first design sub-process and a second design sub-process, outcomes of one of the first and second design sub-processes being linked to outcomes of the other of the first and second design sub-processes and vice versa by a relationship between one or more first design sub-process variables (A) and one or more second design sub-process variables (B), wherein the method comprises:

providing a ~~user~~ configurable interface between the first and second design sub-processes and configuring the ~~user~~ configurable interface to control the manufacturing design process by specifying which of the one or more variables (A,B) are active variables, each of which can have its domain ~~their domains~~ modified by at least one process within the sub-process to which the each active variable belongs, and which of the one or more variables (A,B) are passive variables,

each of which has its domain ~~have their domains~~ determined within allowable values by the domains of the other variable or variables in the relationship but not by any process within the sub-process to which the each passive variable belongs,

determining a manner of evaluation of the relationship and a dominance of a sub-process ~~in an overall~~ the manufacturing design process from the specifying ~~specification~~ of which of the variables are active variables and which are passive variables, and

storing a result of the determining for use in controlling the manufacturing design process.